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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,405	10/24/2003	Eugene P. McLoughlin	68.0129 CNT1	1475

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EXAMINER

DANG, HOANG C

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,405

Applicant(s)

MCLOUGHLIN ET AL.

Examiner

Hoang Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-48 and 54-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-48 and 54-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10242003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 38, 40, 41, 42, 54, 56, 57, 59, 60, 62 and 64 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Mashaw, Jr. et al (see "sliding seal 15 and figures 1C, 2C, 4C, 5C and 6C and column 1, lines 50-53)

As for claims 57 and 64, see column 1, lines 54-63.

3. Claims 38, 40, 43, 44, 54, 55, 56, 59, 60, 62 and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Hines et al (US 4,842,074).

The claimed structure reads exactly on the reference's when members (55), (51), (63) and (77) of Hines et al are respectively considered as "valve member or first member", "sleeve or second member", "inlet orifice" and "sliding seal" as recited. It is noted that the claims do not require the intermediate positions between the fully open position and fully closed position. All of the orifices 63 of Hines et al are selected to be opened or closed at one time.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 43 and 66-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mashaw, Jr. et al in view of Carmody et al (US 5,906,238).

Mashaw, Jr. et al disclose the invention as claimed except that Mashaw, Jr. uses a mechanical actuator whereas the claims called for a hydraulic or/and electrical actuator. Carmody et al discloses a downhole sliding sleeve valve as that of Mashaw, Jr. et al. However, Carmody et al disclose that it is well known in the art to actuate such a sliding valve with an electric motor, hydraulic or pneumatic systems or solenoid systems (see column 2, lines 4-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mashaw, Jr.'s such that it is hydraulically or electrically actuated as claimed in view of the teaching of Carmody et al '238.

6. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mashaw, Jr. et al or Hines et al in view of French (WO 99/19602).

Mashaw, Jr. et al or Hines et al disclose the invention as claimed except that it is not clear whether the orifices accommodate "full bore" in its fully open position. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the valve of Mashaw, Jr. et al or Hines et al "full bore" so that fluid flow through the valve to the surface is not restricted in view of the teaching of French '602 (page 9, lines 23-26).

7. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mashaw, Jr. et al.

Mashaw, Jr. et al discloses the invention as claimed except that the sliding seal is mounted on the second member whereas the claim calls for the first member. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

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reverse the position of the seal and orifices in Mashaw, Jr. et al's since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167.

8. Claims 39, 45-48, 61, 63 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hines et al in view of Upchurch (US 4,403,659) or Witten (US 4,782,896).

Hines et al discloses the invention as claimed except that the apertures 63 do not include a protective insert. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apertures 63 of Hines et al with protective inserts in view of the teaching of Upchurch (see insert in port 31) or Hines et al (see inserts 80). With respect to the exact type of material being selected, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Regarding the limitation of "a hardness of at least 1,200 knoops", it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hines et al in view of Carmody et al (US 5,906,238).

The Carmody et al reference is applied as above.

Specification

9. The disclosure is objected to because of the following informalities: The copending application recited on the first page of the specification should be updated.

Appropriate correction is required.

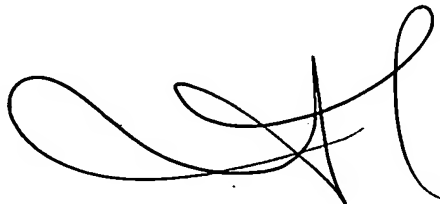
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Dang whose telephone number is 703-308-2149. The examiner can normally be reached on 9:15-5:45 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoang Dang
Primary Examiner
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A handwritten signature in black ink, appearing to be 'HD' with a large loop and a vertical stroke, positioned below the printed name.